

Guideline B-15

Use and Storage of Pesticides in and around Drinking-Water Systems

Legislative Authority:

Pesticides Act, R.S.O. 1990, c. P.11, Section 4

Safe Drinking Water Act, 2002, S.O. 2002, c.32

Responsible Director:

Director, Standards Development Branch

Last Revision Date: February 9, 2004

Protecting our environment.



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Table of Contents	Page
1.0 Definitions	4
2.0 Scope	5
2.1 Pesticide Use	
2.2 Integrated Pest Management	
2.3 Filling of Mixing Tanks	
2.4 Equipment Washing	
3.0 Exemptions from Guidelines	6
3.1 Rodent Control	
3.2 Public Health	
3.3 Mechanical Devices	
4.0 Notification	7
5.0 Storage of Pesticides	7

Synopsis

This guideline applies to the use of pesticides at drinking-water systems in the interest of protecting potable water supplies.

The purpose of the guideline is to provide information on the proper use and storage of pesticides in and around drinking water systems to prevent pesticide contamination of potable water supplies. This guideline supports the *Pesticides Act* and Ontario Regulation 914 under the *Pesticides Act* which controls the use, sale, storage, transportation and disposal of pesticides, and the *Safe Drinking Water Act, 2002 (SDWA)* which provides for the protection of human health and the prevention of drinking-water health hazards through the control and regulation of drinking-water systems and drinking-water testing.

This guideline does not apply to water treatment chemicals used in the treatment of water to achieve and maintain potability as authorized by the *SDWA* by an approval or a permit.

1.0 Definitions

Safe Drinking Water Act, 2002

Drinking-Water System:

A drinking-water system is defined by the *SDWA* as a system of works, excluding plumbing, that is established for the purpose of providing users of the system with drinking water and that includes,

- (a) any thing used for the collection, production, treatment, storage, supply or distribution of water,
- (b) any thing related to the management of residue from the treatment process or the management of the discharge of a substance into the natural environment from the treatment system, and
- (c) a well or intake that serves as the source or entry point of raw water supply for the system.

Operating Authority:

In respect of a drinking-water system, includes the person or entity that is given responsibility by the owner for the operation, management, maintenance or alteration of the system.

Owner:

In respect of a drinking-water system, includes every person who is a legal or beneficial owner of all or part of the system, but does not include the Agency or any of its predecessors where the Agency or predecessor is registered on title as the owner of the system.

Ontario Regulation 914 under the Pesticides Act

Pesticide:

Any organism, substance or thing that is manufactured, represented, sold or used as a means of directly or indirectly controlling, preventing, destroying, mitigating, attracting or repelling any pest or of altering the growth, development or characteristics of any plant life that is not a pest and includes any organism, substance or thing registered under the *Pest Control Products Act* (Canada).

2.0 Scope

2.1 Pesticide Use

The application of pesticides around, over, or in the immediate vicinity of drinking-water systems is **not** recommended. Drinking-water systems that include the following are of most concern as there is a higher potential for contamination of potable water:

- ▶ reservoirs open to the air and located out-of-doors;
- ▶ covered in-ground reservoirs;
- ▶ reservoirs located within structures and used for storage, flocculation or clarification processes;
- ▶ open water areas, or sites with water wells, tile fields for water collection, or springs located on the premises.

Record keeping of pesticides used in and around any drinking water system should be kept on site and signed by a site official. Information on pesticide use, as a minimum, should include:

- ▶ date of pesticide use
- ▶ applicator's name
- ▶ name of pesticide and purpose of use
- ▶ specific location of use

2.2 Integrated Pest Management

It is recommended that Owners or Operating Authorities of Drinking-Water Systems implement Integrated Pest Management strategies which stress pest prevention, identification and monitoring so as to reduce the reliance on the use of pesticides. Integrated Pest Management (IPM) is a decision-making process which uses a variety of techniques, including cultural, mechanical and biological methods, along with pesticides, to suppress pest populations.

For example, the first step in an IPM program for rodent control program is to monitor the area to determine the extent of the rodent population, the location of harbourage and nesting sites and sources of food. Preventative treatments are used to manage rodent populations and include the use of good cultural practices such as sanitation to eliminate food sources, and the use of physical controls such as rodent-proof barriers to exclude them from structures to prevent infestations. A combination of controls may be required, including the use of pesticides. When a decision to use a pesticide is made, formulations and application methods which are suitable for the treatment area need to be considered.

2.3 Filling of Mixing Tanks

The filling of mixing tanks used for pesticide application is not recommended on the premises of drinking-water systems. If it must be conducted on the premises of a drinking-water system, the equipment used in the taking of the water must be equipped with an effective device to prevent back-flow. Subsection 25 (1) of Ontario Regulation 914 under the *Pesticides Act* prohibits “the use of water from a well or from a lake, river or other surface water in performing an extermination unless the equipment used in taking the water or in the extermination is equipped with an effective device to prevent back-flow”.

2.4 Equipment Washing

The washing of any equipment used to perform an extermination is prohibited on the premises of drinking-water systems. Subsection 25 (2) of Ontario Regulation 914 under the *Pesticides Act* prohibits persons “to wash any equipment used to perform an extermination in or near a well or in or near a lake, river or other surface water in such a manner that any pesticides may be directly or indirectly discharged into a well or into a lake, river or other surface water”.

3.0 Exemptions from Guidelines

3.1 Rodent Control

Exempt is the use of rodenticides in tamper-proof bait stations for rat and mouse control within and around drinking-water system by a licensed structural exterminator, under the supervision of the Owner or operating authority of the drinking -water system.

3.2 Public Health

Exempt is the use of pesticides by an appropriately licensed exterminator to control disease-causing pests in the interest of public health under the *Health Protection and Promotion Act*, or to control noxious weeds by an order issued under the *Weed Control Act*. Such exterminations must be performed under the supervision of the Owner or operating authority of the drinking-water systems.

3.3 Mechanical Devices

Exempt is the use of mechanical devices or apparatus which do not utilize any chemical pesticides.

4.0 Notification

Notification of land exterminations must be carried out in accordance with Sections 64 to 79, of Ontario Regulation 914 under the *Pesticides Act*.

5.0 Storage of Pesticides

If pesticides are used under the exemptions outlined in Section 3.0, and stored on the premises of the Drinking -Water System, the storage requirements in Sections 119 to 123 of Ontario Regulation 914 under the *Pesticides Act* must be followed to avoid pesticide contamination of water and impairment of human health and safety.

*Refer to the current versions of the *Pesticides Act* and Ontario Regulation 914 which are available on the e-laws website at www.e-laws.gov.on.ca.